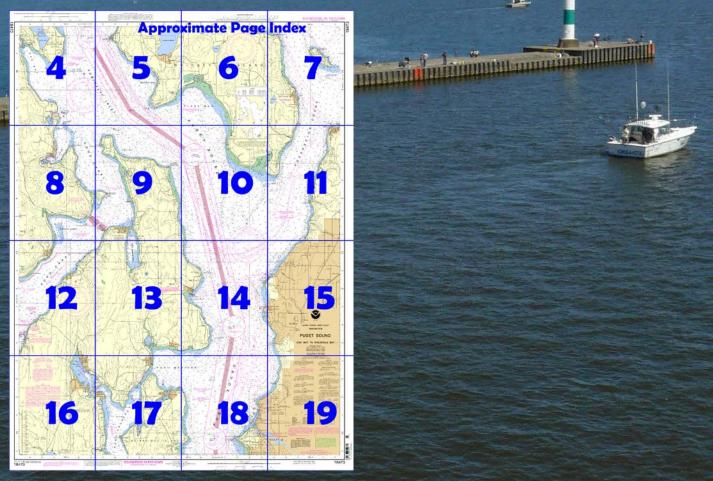
BookletChart[™]

NOAR NO ATMOSPHERIC TO A TMOSPHERIC TO A TMOSP Puget Sound - Oak Bay to Shilshole Bay NOAA Chart 18473





- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

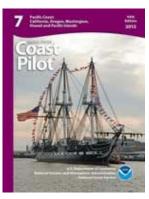
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18473.



(Selected Excerpts from Coast Pilot)
Apple Cove Point is a low sandspit
projecting 220 yards from the high,
wooded land of the peninsula. The point
is steep-to, but a shoal makes out nearly
0.5 mile SE from it. Just off the point is a
light. Heavy tide rips caused by strong
NW winds and a strong ebb current are
encountered in the vicinity of the light.
Appletree Cove is the open bight on the
W side of the sound about 1.5 miles S of
Apple Cove Point. It affords anchorage in
30 to 60 feet inside the line of the

entrance points, with some shelter from winds drawing in or out of the sound, but not from N and SE.

Kingston, a town on the N side of the cove, has a large, well-equipped small-craft basin, a 420-foot long fishing pier, and a pier with a ferry slip at its end. The ferry runs between Kingston and Edmonds. The basin is used by tugs, fishing boats, and pleasure craft. The harbor is protected by a stone breakwater that extends about 340 yards SW from the ferry pier; the end of the breakwater is marked by a light. In 2009, the marina had a reported depth of 12 feet in the entrance and 6 feet alongside the berths. Services available include: electricity, gasoline, diesel fuel, water, ice, pump-out facility, surfaced launch ramp and marine supplies. The marina has space for 275 small-craft including about 49 transient berths. Edwards Point is a high, wooded point on the E side of Puget Sound 3.6 miles ESE of Apple Cove Point. It is a turning point for vessels running from Seattle N into Possession Sound and adjoining waters.

Edmonds is an incorporated city 1 mile NE of Edwards Point with a small boat basin and marina under the administration of the Port of Edmonds. The protected basin is entered from the NW at about the midpoint of the marina; the entrance is marked by lights and a light is on the SW corner. The reported depth is 9 feet alongside the piers. There are open and covered berths for about 600 craft up to 50 feet, including 20 transient moorings; berth assignments are made by the harbormaster. Services available include: electricity, gasoline, diesel fuel, water, ice, marine supplies, pump-out station and full repairs can be made. A 50-ton marine travel lift and 10-ton fork lift are also available at the marina. The marina monitors VHF-FM channels 16 and 69.

Just N of the boat basin are a fish haven and fishing pier, the Edmonds and Kingston ferry landing, and a scuba diving area N of the landing. The fish haven is marked by private buoys near the boat basin breakwater N section; private buoys also mark the W side of the scuba diving area. A 037°01'-217°01' measured nautical mile is on the shoreline 1 mile NE of Edmonds. The front markers are on short metal poles atop the seawall which protects the railroad tracks; the rear markers are about 20 yards SE of the front markers. The bluff is 60 feet high behind the NE pair of markers and 12 feet high behind the SE pair of markers. All four markers are white wooden triangular daymarks.

Point Wells is a low, sandy point projecting 450 yards from the high land 1.5 miles S of Edwards Point on the E side of the sound. It is distinguished by prominent oil tanks. It is a water terminal and storage plant of Chevron USA, Inc. There are two wharves here, however, only the S wharf is in use. The wharf is 1,054 feet long and has a deck height of 21 feet. In 1983, reported depths of 40 to 70 feet were alongside. A conveyor serving this wharf is used for outloading drummed petroleum products. Barges are loaded on the inside of both the N and S extensions of the wharf.

The current at Point Wells is unpredictable being inconsistent for similar tidal conditions; however, a vessel making a port landing on a flood tide may expect to be set off the pier. The use of an anchor is recommended when docking in high wind. The Manager of the Marine Department of Chevron USA, Inc. prefers that vessels not be docked without the use of tugs when conditions are such that damage might be done to the wharf. Deep-draft vessels approaching the wharf for a starboard landing during a flood tide must guard against being set on to the shoal S of the wharf. A company-maintained sound signal is on the S wharf.

Richmond Beach is a community on the E shore just S of Point Wells. A tall, charted radio tower (KCIS), marked by aircraft warning lights, is about 1.5 miles inshore from Richmond Beach; it is an excellent landmark, especially at night.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

24 Hour Regional contact for Emergencie

Commander 13th CG District

rict (206) 220-7001

Seattle, WA

RCC Seattle

Table of Selected Chart Notes

PORT GAMBLE BAY

The controlling depth in the entrance channel was 23 feet July 1986.

ubmarine mooring cable

CULTUS BAY
The channel into Cultus Bay
is marked by private aids.

OCAL MAGNETIC DISTURBANCE Differences of more than 2° from the normal variation have been observed in Hood Canal at Point Hannor

Mercator Projection Scale 1:40,000 at Lat. 47°53' North American Datum of 1983 (World Geodetic System 1984)

SOUNDINGS IN FATHOMS (FATHOMS AND FEET TO ELEVEN FATHOMS AT MEAN LOWER LOW WATER

The tidal current vectors shown on this chart (in green) represent the overage maximum speeds of flood and ebb currents, and the direction of flow. The speeds are represented by the numbers shown, and the directions by the orientation of the vector arrows. The maximum speeds will vary through time. For exact predictions, consult the Tidal Current Tables, Parelie Carot of North America. Pacific Coast of North America.

> PORT TOWNSEND CANAL Project depth, 15 ft; width, 75 ft Controlling depths - Sept 1995

Northeastern outside quarter 13.5 ft

CAUTION

Flashing red lights on Navy range vessels between Keyport and Brownsville and atop a building at the seaward end of the southern buildings at Keyport Naval Undersea Warfare Center indicate torpedo firings, or that noise measurement tests are in progress, or that conditions are generally hazardous to mariners.

HEIGHTS

Elevations of rocks, bridges, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

NOTE E

Mariners are cautioned that the Washington State Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards or other emer gency conditions.

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) and for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.655° southward and 4.491° westward to agree with this chart.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOTE D

Floating security barriers have been installed at various U.S. Naval installations throughout Puget Sound. The barriers are marked by numerous flashing yellow (FI Y 2s) Navy maintained lighted buoys and approximately mark the Restricted Areas surrounding the facility.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area

Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and sub-marine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths o pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or

unlighted buoys.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and obtailed by the commercial broadcasting stations are subject to error and

should be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

BACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Seattle Wash KHR-60 162 55 MHz Puget Sound, Wash. WWG-24 162.425 MHz

For Symbols and Abbreviations see Chart No. 1

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

- 1

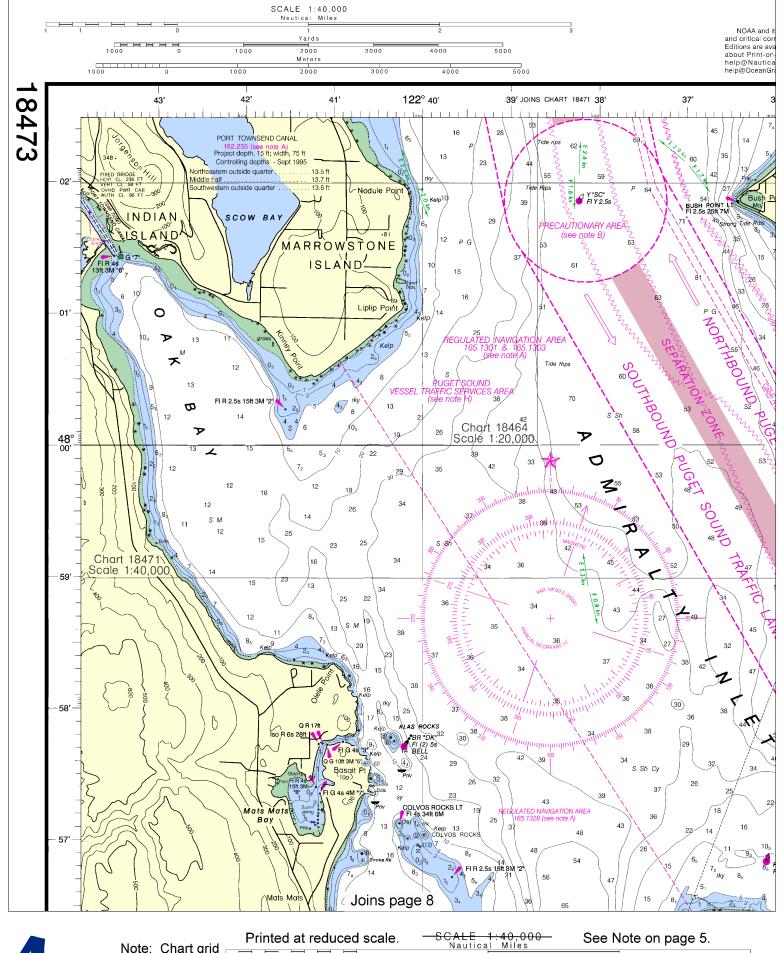
nternational Regulations for Preventing Collisions at Sea, 1972. The entire area of this chart falls seaward of the COLREGS Demarcation Line

- 1

TIDAL INFORMATION

18

Height referred to datum of soundings (MLLW)		
Mean High Water	Mean Low Water	Extreme Low Water
feet 8.6 9.1 9.4 10.5 10.1 10.9	feet 2.6 2.7 2.7 2.8 2.8 2.9 2.9	feet -4.5 -5.0 -5.0 -5.0 -5.0 -5.0



Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000

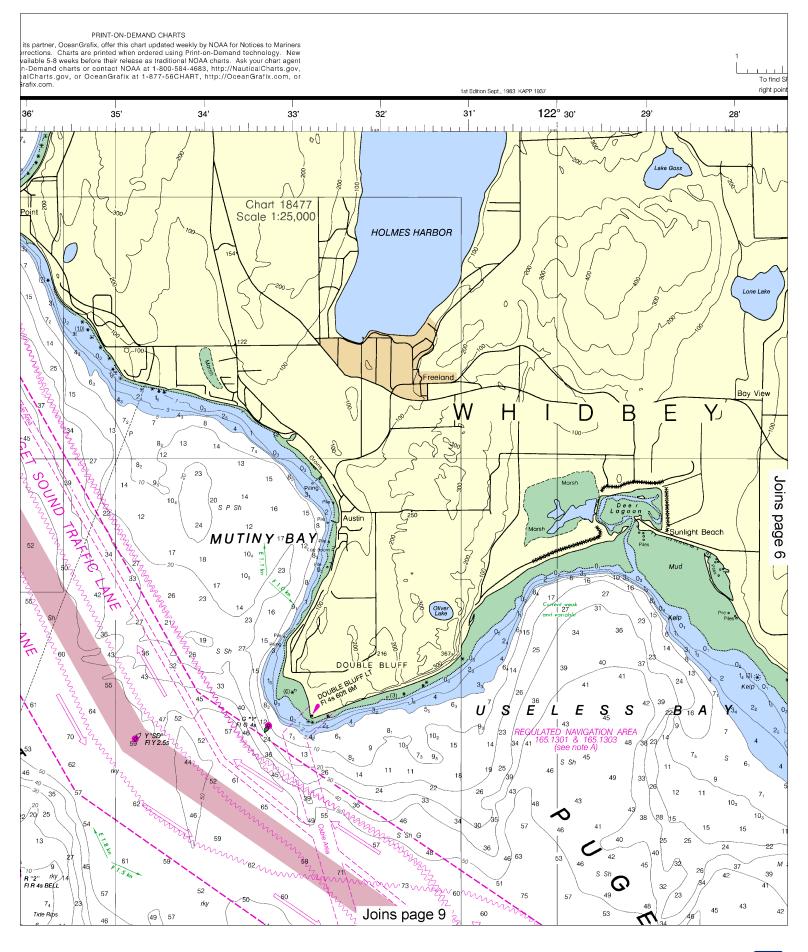
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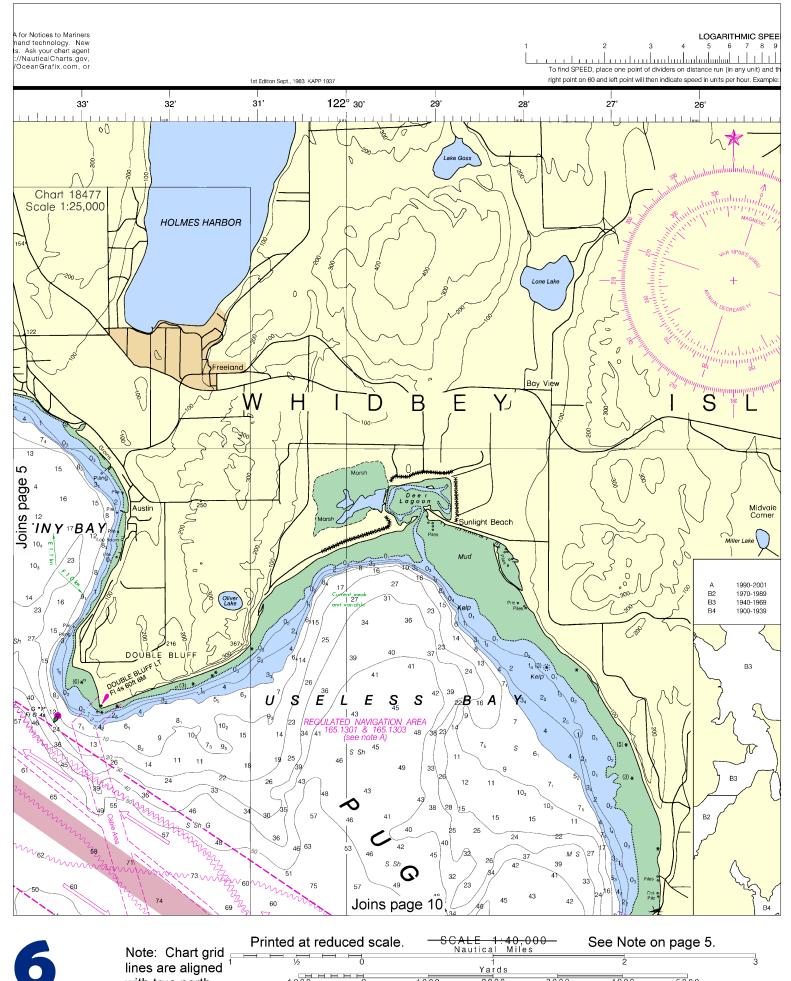
See Note on page 5.

Nautical Miles

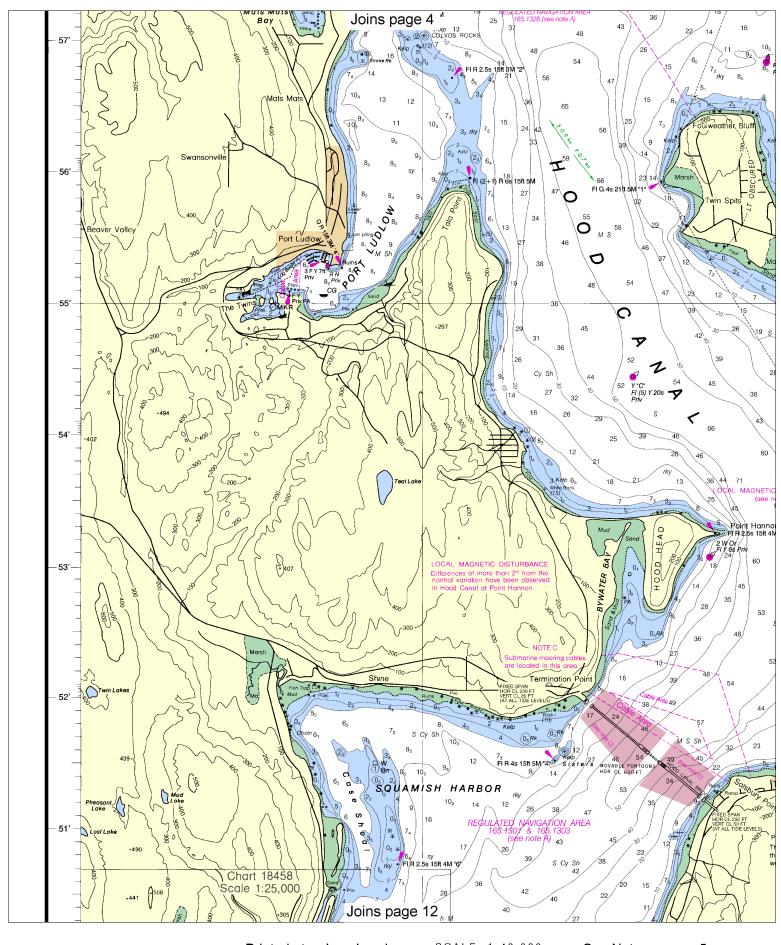
Yards

1000 2000 3000 4000 5000





1000 0 with true north.





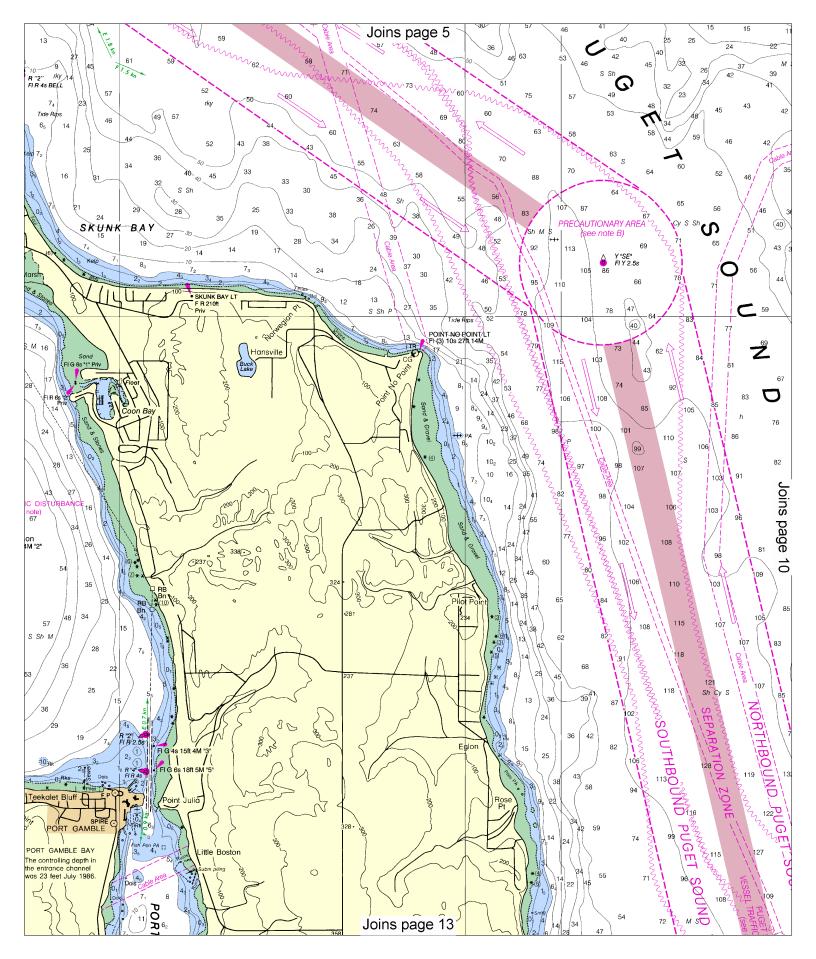
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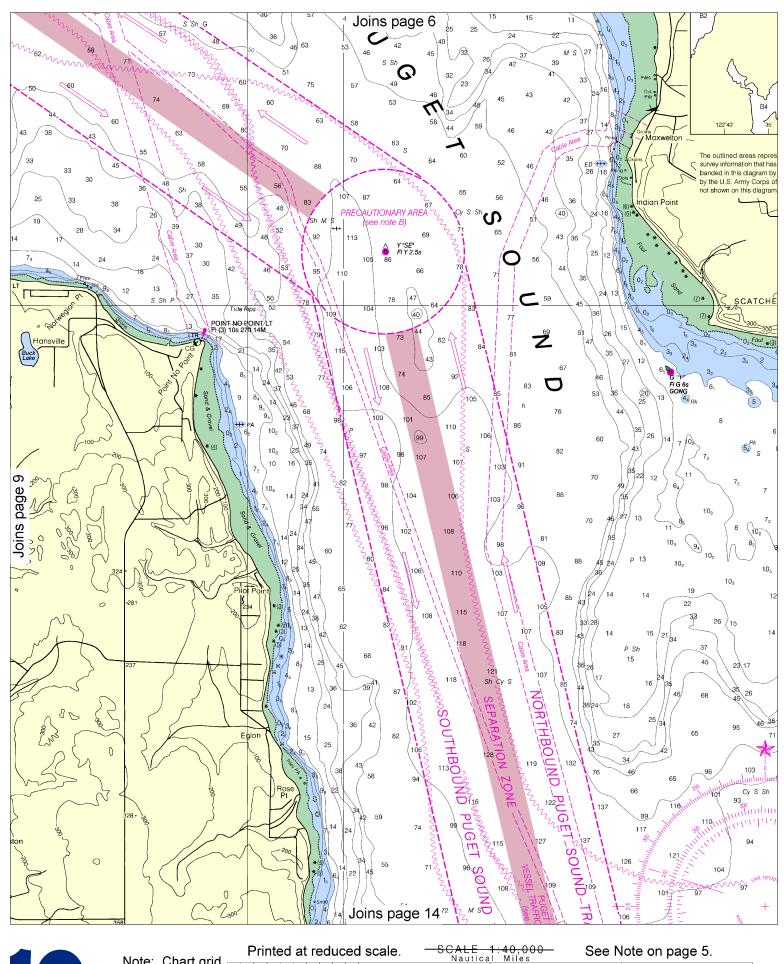
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Nautical Miles

Yards

1000
0 1000 2000 3000 4000 5000







Note: Chart grid lines are aligned with true north.

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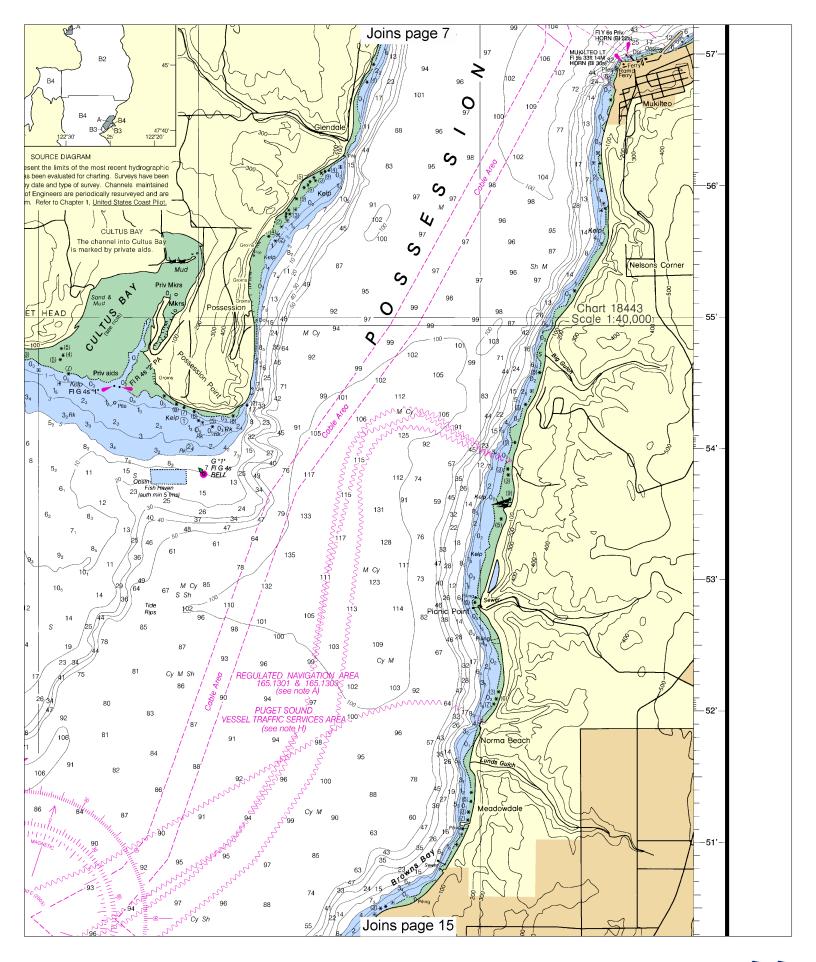
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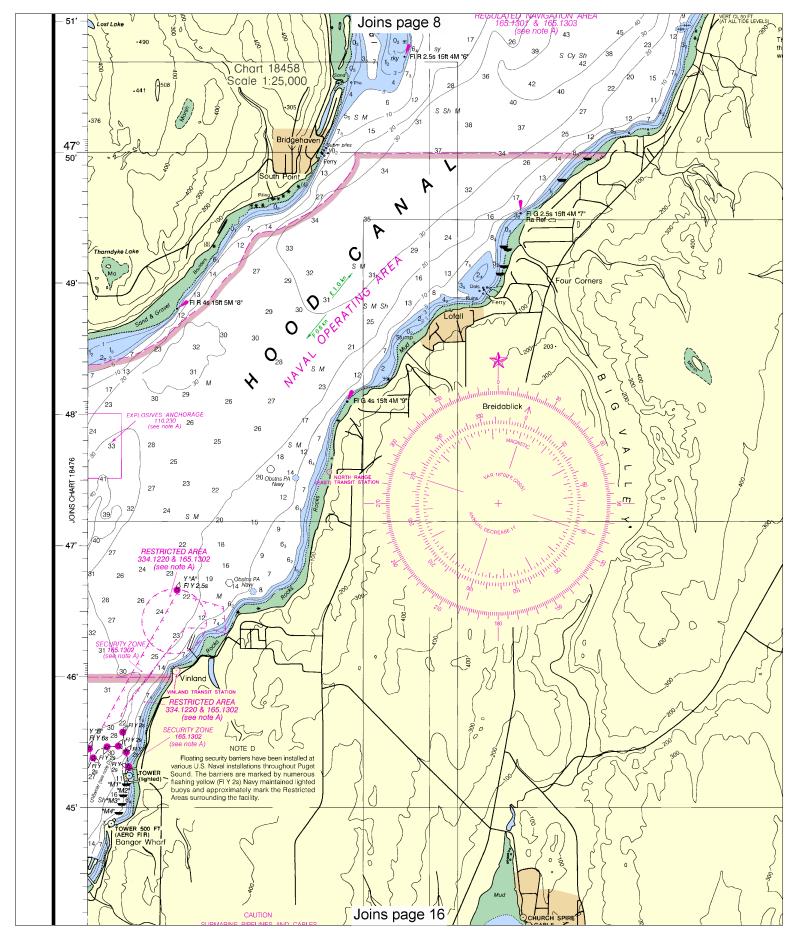
See Note on page 5.

Nautical Miles

Yards

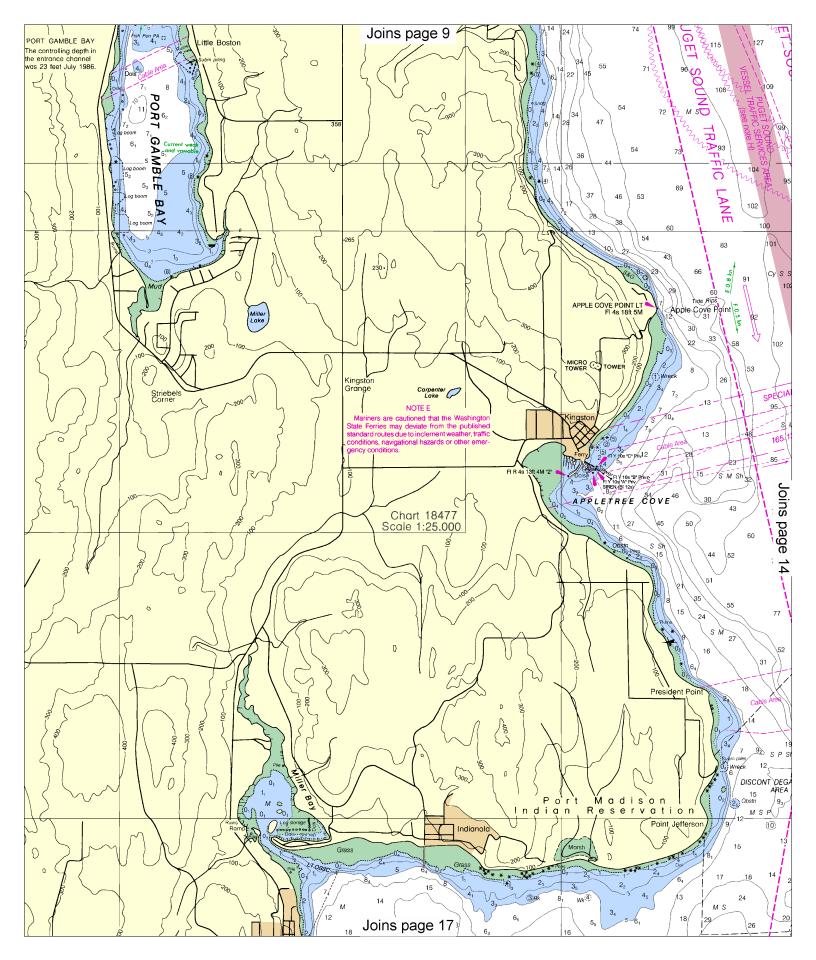
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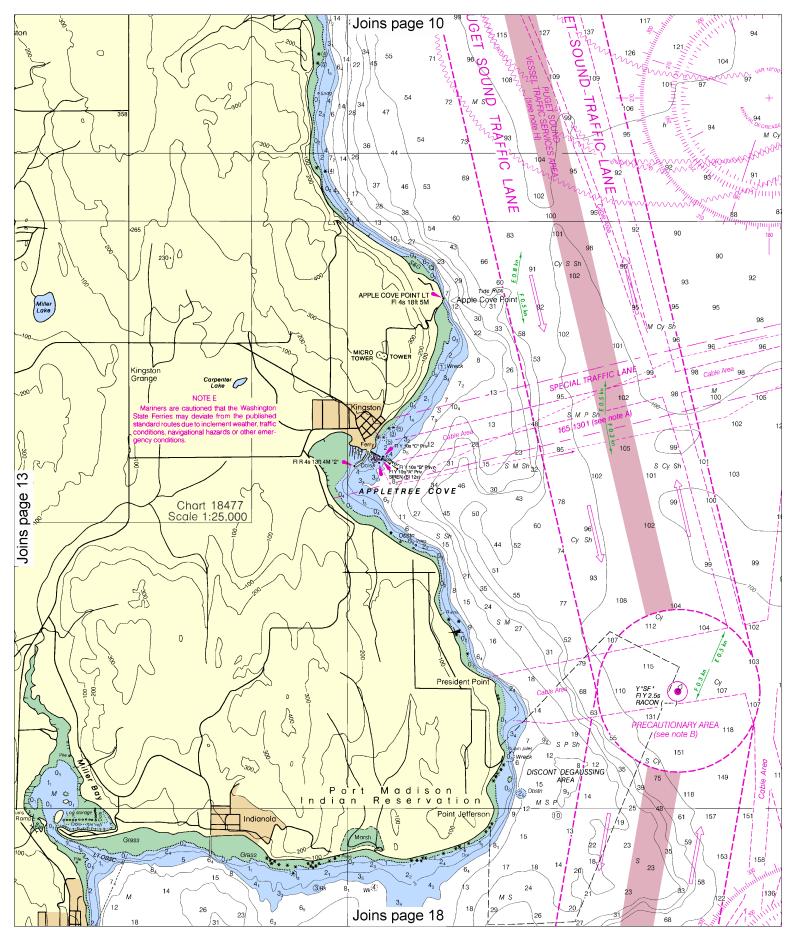




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Note: Chart grid lines are aligned with true north.





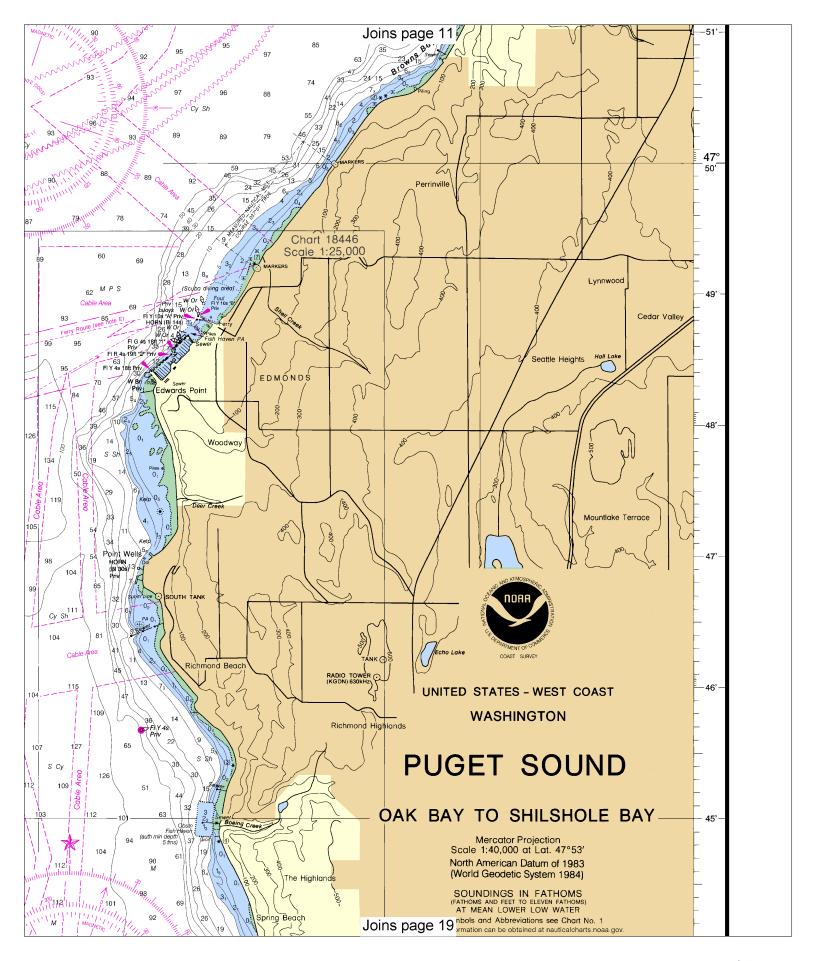
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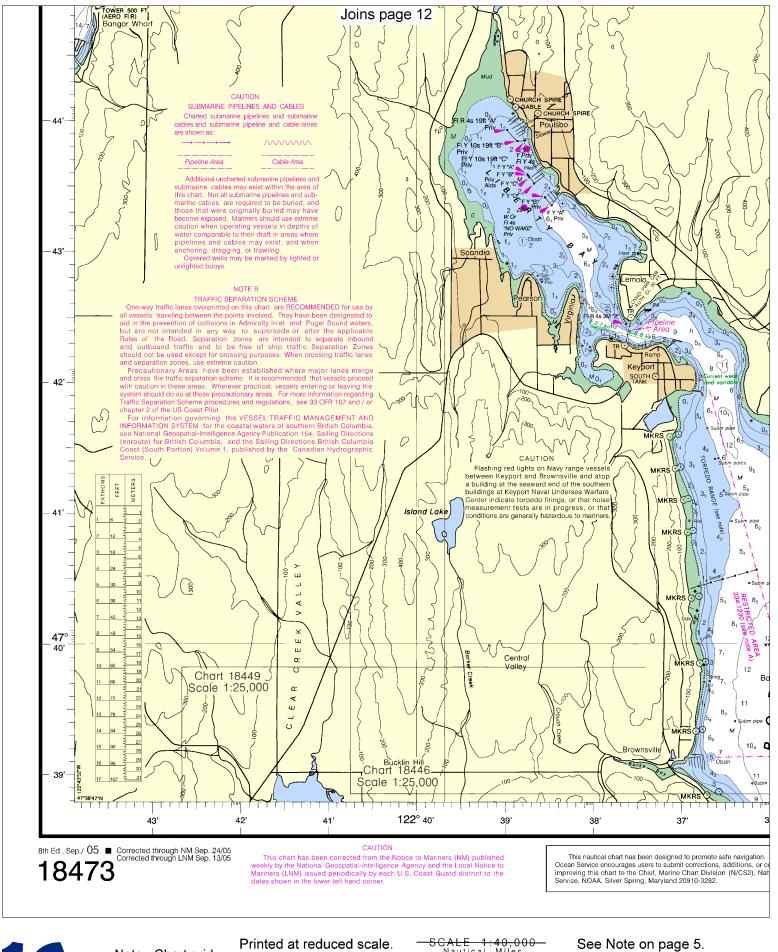
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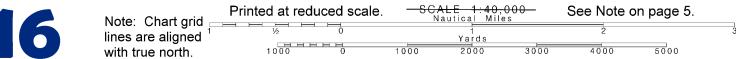
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Nautical Miles

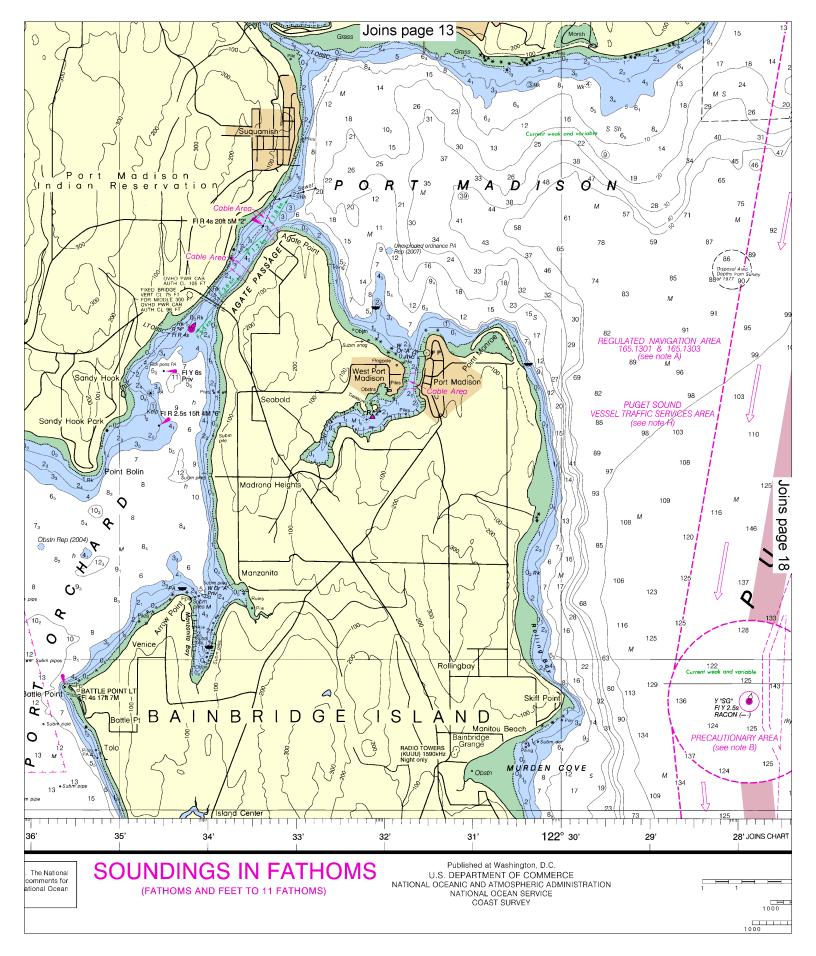
Yards

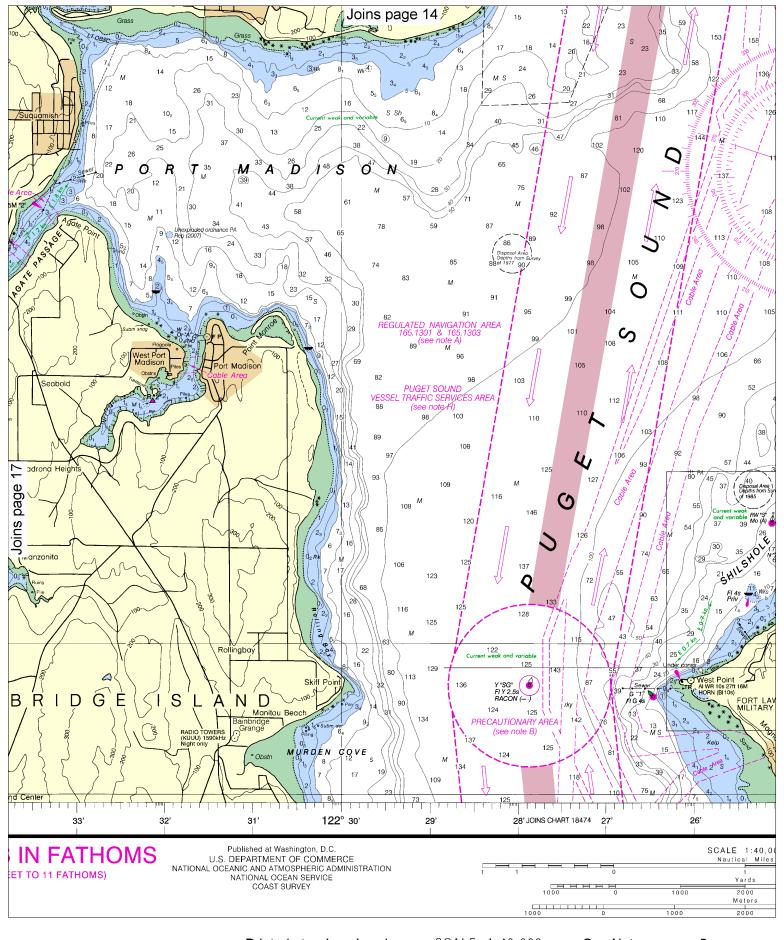
1000
0 1000 2000 3000 4000 5000











Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

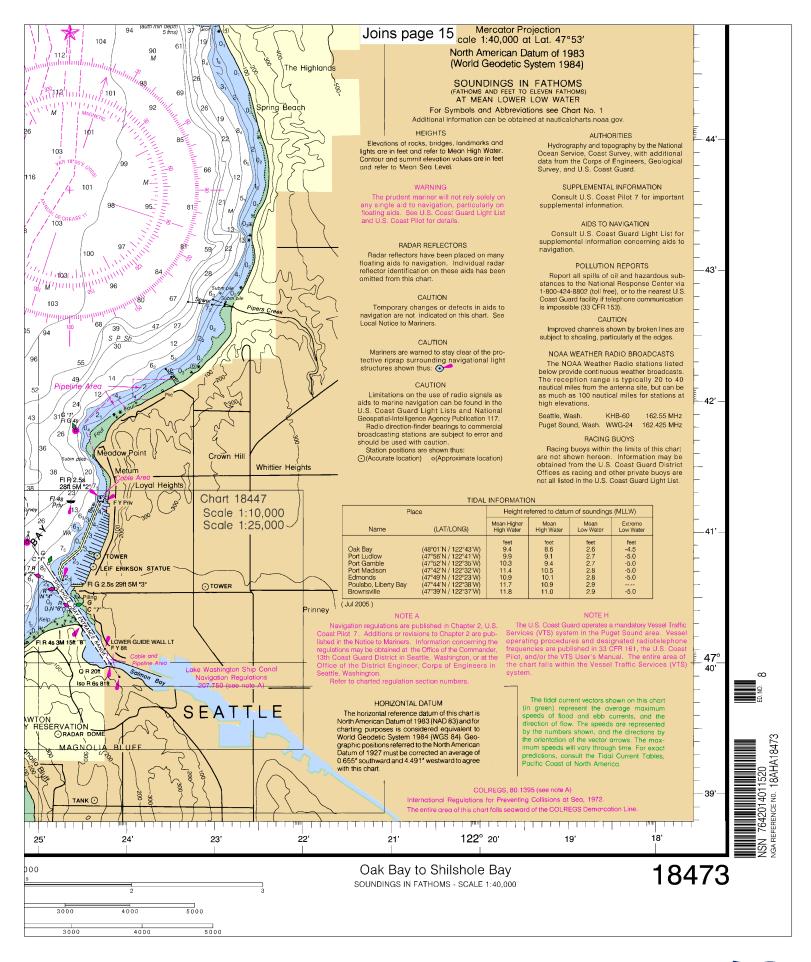
SCALE 1:40,000
Nautical Miles

Yards

See Note on page 5.

Yards

1000 0 1000 2000 3000 4000 5000





VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

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Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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